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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,291	11/21/2003	Mark C. Buckley	H0005364 (16882)	2106
128	7590	11/18/2004	EXAMINER	
HONEYWELL INTERNATIONAL INC.			LE, THANH TAM T	
101 COLUMBIA ROAD			ART UNIT	
P O BOX 2245			PAPER NUMBER	
MORRISTOWN, NJ 07962-2245			2839	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,291

Applicant(s)

BUCKLEY ET AL.

Examiner

Thanh-Tam T. Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-48 are objected to because of the following informalities:

Claim 1, lines 1-2, "a terminal block for coupling.... means at least one conductor... " are confusing.

Claim 2 and claim 14, line 1, "at least one of said at least two cavities" should be changed to -- the at least one of said at least two cavities --;

Claim 2, 4, 14 and 16, line 2, "the width of the blade" lacks an antecedent basis;

Claim 3, line 1, "at least one contact member" should be changed -- the at least one contact member --;

Claim 4, "a screw" should be changed to -- the screw --;

Claims 5 and 6, " ... at least equal to..." is confusing.

Claim 8, line 1, "a pin" should be changed to -- the pin --;

Claim 10 and claim 11, line 2, "at least one conductor" should be changed -- the at least one conductor --;

Claim 10; "wherein said terminal block **is for** coupling..... terminal coupling means **for** coupling..." are confusing.

Claim 11, "wherein said terminal block **is for** coupling terminal coupling means **for** coupling... " are confusing.

Claim 12, lines 1 and 2, "terminal block for coupling means at least one conductor..." are confusing,

Claim 12 and claim 24, line 2, "a PCB" should be changed to -- the PCB --.

Claim 13, lines 3 and 4, "a conductor" is confusing, what are difference between at least one conductor and a conductor?

Claim 15, "at least one contact member" and claim 39, "a contact member" are confusing, what are the difference between a contact member and at least one contact member?

Claim 24, lines 1 and 2, "terminal block for coupling... means at least..." are confusing.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's submitted Prior Art (APA) in view of Kulka (2,991,440).

Regarding claims 1, 12, 24 and 37, APA, figure 4A, discloses a printed circuit board (PCB) having a terminal block for coupling by screw-operated coupling means (102) at least one conductor to the PCB, the terminal block comprising:

- an insulative housing (114) having at least one transverse opening (115) capable of receiving at least one contact member (116) for coupling the at least one conductor to the PCB; and

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- at least two cavities (103) disposed within the insulative housing for accepting the screw-operated coupling means, the housing having a length-wise direction along a reference line, each cavity having a center point.

APA discloses the instant claimed invention as described above except for the center point of at least one of the at least two cavities disposed in an offset position from the reference line in the length-wise direction.

Kulka, figure 1, discloses a screw-type terminal connector for printed circuits having recesses (62), which read on the center point of at least one of the at least two cavities disposed in an offset position from the reference line in the length-wise direction. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APA to have the recesses as taught by Kulka for better connection.

Regarding claims 2, 5, 14, 17, 26, 29, 38 and 41, the at least one cavity having a diameter at least equal to the width of a blade of a standard installer screwdriver, the diameter is equal to 0.125 inches.

Regarding claims 3-4, 6, 8, 15-16, 18, 20, 27-28, 30, 32, 39-40, 42 and 44, the at least one contact member disposed within the at least one transverse opening of the housing, comprising an upper portion with a transverse opening (120) and lower portion with a pin (110), and wherein the upper portion is threaded to accept a screw (102), which has a head having a diameter equal to a width of a blade of a standard installer screwdriver, wherein the head having a diameter equal to 0.125 inches, wherein the pin is disposed to permit through hole mounting to the PCB.

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Regarding claims 7, 19, 31 and 43, a wire guard (118).

Regarding claims 9, 21, 33 and 45, the terminal block comprising solder pads.

Regarding claims 10, 22, 34 and 46, the terminal block for coupling by screw-operated conductor-clamping terminal coupling means for the at least one conductor to the PCB.

Regarding claims 11, 23, 35 and 47, the terminal block for coupling by screw-operated insulation displacement terminal coupling means for coupling the at least one conductor to the PCB.

Regarding claims 13, 25 and 48 the housing comprising at least four transverse opening that can be disposed on an end surface of the PCB, the openings each capable of accommodating at least one contact member.

Regarding claim 36, the housing having a height enabling orientation of a length-wise direction of the terminal block transversely with respect to a longitudinal centerline direction of a larger housing enclosing the terminal block and the PCB, the larger housing having an inner diameter of 1 inch.

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

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5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL
11/12/04.


T. Le